

App. Serial No. 10/560,531  
Attorney Docket No. 2800-131



## **AMENDMENTS TO THE DRAWINGS**

A replacement sheet for new Figure 1 is included herewith.

## REMARKS

Applicants respectfully request withdrawal of the outstanding Office Action objection to Figure 1 in view of the new Figure 1 submitted herewith. The new Figure 1 is now designated by a "Prior Art" legend and is believed to be in acceptable condition.

Reconsideration and allowance in view of the foregoing new claims and following remarks are requested. Original claims 1-11 have been cancelled. New claims 12-25 have been added. Support for new claims 12-25 can be found throughout the present specification. No new matter has been added.

Applicants respectfully request withdrawal of the outstanding 35 U.S.C. 112, second paragraph, rejection. The limitation of an "inverse transfer function" has been removed from the new claim language.

Applicants respectfully request withdrawal of the outstanding 35 U.S.C. 102(b) rejection in view of the new claims submitted herewith. Applicants submit that Ioka (US 2002/0024640) is silent with respect to employing a blending function, as in the present invention, to calculate input signals to at least two light projectors for spreading fluctuations in color intensity over an area to thereby create a substantially invisible transition zone. Rather, Ioka employs an equation to fix for fluctuations in color intensity by adjusting for them.

New claim 12 recites the limitation: "calculating input signals to each of the at least two light projectors for a projected image in a predetermined transition zone based on a *blending function* that controls emitted light directed toward said

predetermined transition zone from each of at least two light projectors.”

Applicants submit that loka is silent with respect to employing a *blending function* to calculate input signals to at least two light projectors.

New claim 12 also recites the limitation: “wherein the input signals to at least two light projectors are provided from tabulating said blending function using red light, green light, blue light *and a blending factor*.” Applicants submit that loka is silent with respect to tabulating a blending function using red light, green light, blue light *and a blending factor* to calculate input signals to at least two light projectors.

The Examiner contends that a blending function of the present invention is disclosed in loka. Applicants respectfully disagree. loka, at paragraph [0012], teaches a compensation data calculator for correcting the output characteristics of each light projector. Applicants submit that the teachings of loka lead to color uniformity across multiple light projectors with a concurrent decrease in the dynamic range of the output of each light projector. Applicants submit that the present invention preserves as much as possible the full dynamic range of the output of each light projector. Hence, a blending function is used to achieve as much preservation of dynamic range of output as possible.

A consequence of preserving the dynamic range of output as much as possible according to the present invention is leaving the original pixel input unchanged. The blending function is employed in conjunction with the original pixel input to determine a “blendpixel” value that reduces sharp visible edges

between the light projectors. The blending function also serves to spread out over an area the fluctuations in color intensity.

One result of employing a blending function of the present invention is that there is a minimal amount of modification of the image before it is sent to a light projector, whereas loka clearly teaches warping and other modifications to the image before it is sent to a light projector (see paragraphs [0050]-[0052] of loka).

New claim 21 recites the limitation: “memory means for storing tabulated blending functions for each projector, wherein each blending function describes the relationship between an input signal and emitted light characteristics of each light projector, the sum of said tabulated blending functions describing the blending function, and control means for applying said tabulated blending functions on said input signal to each light projector so as to obtain predictable image characteristics in the transition zone between the at least two projected images. Applicants respectfully submit that loka is silent with respect to a memory means for storing tabulated blending functions for each projector. Applicants also submit that loka is silent with respect to a control means for applying said tabulated blending functions on said input signal to each light projector.

New claim 22 recites the limitation: “providing an equation of formula (I)  $TF(RGB_{blendpixel}) = [TF(RGB_{original})]^{\beta}$ .” Applicants respectfully submit that loka is silent with respect to a formula that describes the transfer function of the blended pixel that is defined as the transfer function of the original pixel multiplied by a

blending factor,  $\beta$ .


In view of the above remarks, it is believed that the claims satisfy the requirements of the patent statutes and are patentable over the cited art. Reconsideration of the instant application and early notice of allowance are requested. The Examiner is invited to telephone the undersigned if it is deemed to expedite allowance of the application.

Respectfully submitted,

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By

  
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